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Suggestions in the Treatment

OF

SPINAL DISEASES AND CURVATURE.

BY

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The inception of spinal disease and curvature seldom arrests the attention of the physician until some reflex action takes place demanding his aid. Recently, the subject has attracted notice, through the energy and skill of Drs. J. K. Mitchell, Benjamin Lee, of Philadelphia, and Drs. Jacob A. Wood, Taylor and L. A. Sayre, of New York, all of these making efforts toward suspension by some means, between the ilia and occipito-vertebral articulation, and to secure some mechanical support or splint to retain the proper position.

Dr. Sayre's apparatus for suspension fulfills the condition, and places the patient under complete control. His plaster-of-paris dressing, which I proposed in Case 1, was objected to; hence an endeavor, on my part, to use something less disagreeable; recollecting that some years since the use of silicate of soda dressing for fractures of the thigh was frequent, I thought that such an application as a substitute for the plaster-of-paris might be acceptable and efficient; it proved so. Herewith are presented the results of private practice cases coming under treatment; they are all favorably improving:—

CASE 1.—Female; white; married; aged 35 years; normal height five feet nine inches; weight about 140 pounds; consulted me November 1st, 1876, for supposed uterine disease; upon examination discovered none. She, however, complained of languor and uneasiness in the back, though not enough to cause either

herself or myself to think seriously of it. I directed her to take tonics; she used them for several months, with an occasional belladonna plaster. After this period the spine trouble was more prominent, when I used slight counter-irritation, with tonics, for several months longer; she became discouraged; discontinued treatment. September 14th, 1877, she again consulted me. Her symptoms were more aggravated; had a haggard countenance, suffered pain, and was anæmic. I noted that she frequently changed her position while seated. Upon inquiry found that she was continually making fruitless efforts to be comfortable.

Examination.—The spine tender, from the seventh cervical to the last dorsal vertebræ, and indications that periosteal inflammation had taken place, with bulging of interosseus muscles; height five feet, seven inches. I recommended Dr. Sayre's plaster dressing. She disliked it very much, because some one informed her that it would fill her clothing, etc., with dust. I suggested a course of treatment pursued by me for twenty-six years—to put the patient to bed, and keep a pustular eruption along the spine; where means permitted this was frequently successful, but it was out of the question here. Upon consideration, recommended the application of *silicate of soda*.

Application, September 20th, 1877.—Placed a closely-fitting merino shirt upon the patient; suspended her by the pulleys of Dr. Sayre; after extension had been made, a roller bandage of unbleached muslin, three inches wide, was

passed around the body downward from the armpits, making "turns" where necessary; then with a paint brush covered the surface with the soda solution; a cap of light tin, muslin covered, wet with the solution, over the crests of the ilia, and a similar brace from over this cap to the axillæ; ran strips of muslin perpendicularly downward over the whole bandage, covering them with the solution; lastly enveloped the trunk in a roller bandage, as at first, varnishing it all over with the soda. Lowered the patient, permitting her to lie down for three hours in a warm room, when the jacket will be dry enough to remove by cutting it open along the spine. Any roughness on the interior is removed by malleting on a shaping block; then remove about an inch from each of the cut edges; finish the inside with flannel; trim the edges, fasten straps or use lacers, and coat over outside with the soda; let dry, when it is ready for use. The patient was again suspended, the corset applied over the merino shirt, as before; it was securely fastened with the straps, and gave instant and permanent relief.

Progress.—On Feb. 25th, 1878, her condition had much improved; suffered no pain, had good appetite; regained her natural height, 5 feet 9 inches; visited Philadelphia and some parts of New Jersey. The muscles of the back have developed so much as to require a new bandage; she has gained 18 pounds. I constructed an improved one, using the merino shirt as before, enveloping it in a bodice of unbleached muslin, extending from the shoulders to three inches over the crest of the pelvis; coated it with soda; placed two covered braces of tin, each one and a half inches wide, from the spine of the scapulæ to the posterior portion of the ilia, which left a space of from one to two inches between them; then two braces cut along the edge of the bottom and sides, at intervals of one inch, one inch in width, to extend from the axillæ to two inches over the hips, being three inches wide at the top, and six inches at the bottom, muslin-covered, varnished with soda solution; wrapped the trunk with a three and a half inches bandage, from above downward, covered with soda solution; stayed with perpendicular strips, wetted with the solution; incased the whole in a second fitted body, painting it with the soda solution when it was completed; this required about three-quarters to one hour. The patient was removed, and in five hours the corset was

taken off, trimmed and replaced as before. Weight three pounds.

FIG. 1.

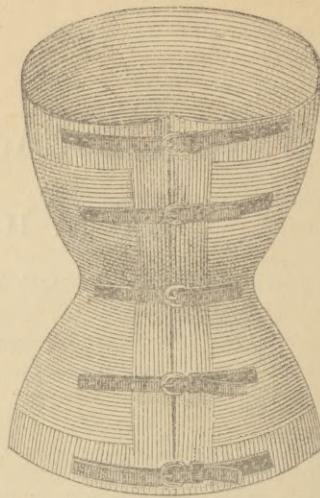
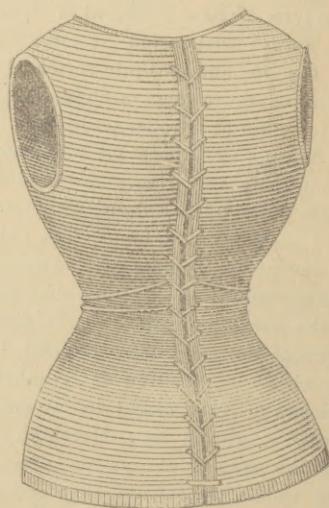


Fig. No. 1 shows jacket worn five months, retaining its hardness and shape; it became too small, and I was obliged to make another, upon

FIG. 2.



which I improved, as represented in Fig. No. 2. Weight three and a half pounds.

CASE 2.—Female, white, single, aged 21 (Oct. 19, 1877), of healthy family. She has suffered in her back for a year; dates it from her school life, when between 18 and 19; cannot long retain any sitting position, but must constantly change, to secure ease. She had been treated

by her local physicians, but no mechanical means used for her relief. Examination revealed tenderness of the spine, extending over the first five dorsal vertebrae; a disposition to lean forward, causing the back to bulge, but exhibiting no curvature. I placed one of the silicated soda bandages upon her; she had relief from pain, and is rapidly improving.

CASE 3.—Curvature; female; white; married; aged 30; December 15th, 1877. Suffered, when I first saw her, from what I considered an acute lumbago. She improved slightly, but would relapse. February 3d, 1878, saw the patient; then noticed, for the first time, a depression of the right shoulder, because heretofore I had seen her reclining. Closer inquiry developed the disease: Examination showed the arc to the left side, from one-half to one inch; sensitiveness of the four last dorsal vertebrae, with bulging of the muscles. Some eight months since she fell down stairs, but did not attribute the trouble to that accident. She has suffered from numbness of the side, limbs and arms, and used ineffectual remedies. I applied the jacket, with much relief and excellent results, so far. March 14th, 1878, all the above symptoms have disappeared, and the patient is highly gratified with the results.

March 25th. Patient doing well; suffers little or no pain; has gained in flesh; jacket does not meet, by an inch; opened it in front, widened it one inch, closed solid on the back, and reapplied. I find that opening the jacket in front is quite an advantage, giving firmer support to the spinal column, and more convenient. When a jacket needs widening, take a piece of leather the width required; cover with muslin the length of the cut edge of jacket on each side; eyelet-hole the leather part, and let the muslin be long enough to reach over the body of the jacket; wet with soda solution, and after it is dry apply as before.

CASE 4.—Curvature; March 2d, 1878; female; white; aged 60; mother of eleven children; healthy; good family history. Two years ago fell down stairs; recognized pain in vertebrae August last. In January was compelled to go to bed, remaining there until date. She consulted several physicians without any effort being made to afford her proper relief; now she is ill nourished and cannot sleep without an opiate.

Examination exhibited curvature about

three quarters of an inch to the left, superiorly, crossing, at the fifth dorsal, to the same arc on the right side inferiorly.

Suspended the patient on March 7th; she fainted; in about fifteen minutes revived; had a stool; was again drawn up and the jacket applied, giving much relief; patient slept five hours. This application was made in the presence of Drs. H. L. Orth, C. A. Rahter, Hugh Hamilton, S. R. Gorgas, and my son, D. H. Coover, who rendered assistance.

March 9th, suspended and reapplied the jacket, which gave complete relief; she rested better the following night than she had for months before.

March 11th. She got out of bed herself, and walked through the room several times without assistance.

March 12th. Readjusted jacket, to remove some folds of undershirt, which caused discomfort.

March 14th. Patient doing well; regaining strength, walking through the room frequently during the day without assistance, and slept well without the opiate.

March 23d. Much improved; going down stairs to meals regularly, and walking out without assistance; rests well at night.

CASE 5.—March 18th, 1878. Called to see Mrs. Mary L., aged 62; of good healthy family; weight 80 pounds. She fell two years ago, injuring her spine about the lower dorsal vertebrae. She has suffered pain ever since, is wasted in flesh, anæmic, and has not been able to walk without the aid of crutches, or go up stairs, for 18 months.

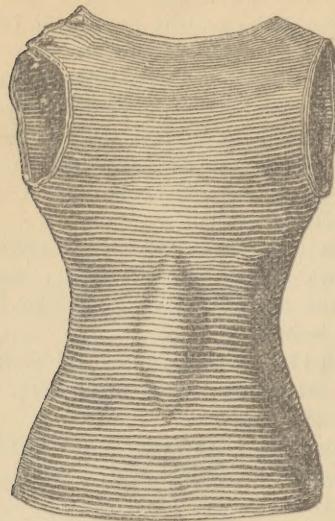
Examination.—Posterior curvature, with permanent ankylosis of the four last dorsal vertebrae.

March 22d. Suspended my patient and applied the silicated soda jacket, not with the view of correcting the deformity, but with the hope of relieving the pain and preventing further deformity. She experienced immediate relief.

March 28th. Patient doing well; suffers little or no pain, and is greatly supported by the jacket. Should the jacket lose the shape while drying, before applying, lay cloths, wrung out of hot water, inside and outside, for several minutes, or steam it; then put the jacket on and lay the patient down for several hours, when it will be dry and moulded to the body.

Fig. 3 represents the jacket on the back,

FIG. 3.



showing the curvature. This jacket is opened in front.

Remarks.—The plaster-of-Paris dressing is in constant danger of cracking and crumbling, requiring the tediousness of reapplication; it is very disagreeable to handle, does not permit

removal for cleansing the body so often, and lastly, is not attended with as positive success, on these grounds.

The silicate of soda dressing sets nearly as quickly as plaster; does not crack or crumble; can be reapplied readily; allows cleansing of the body frequently, say every four weeks. The corset is always reapplied while the patient is suspended; the braces are essential; the lacing is a very important point in the corset; if you lace so that the draw strings are in the centre, the patient can at any time loosen or tighten it, the ends remaining closed, and the support is not weakened, serving the purpose of a dinner pad, when the patient is inconvenienced after eating a full meal. In my hands this corset has afforded invariable relief from pain and gain in health.

The *positional* treatment recommended by Drs. Taylor and Lee does not fulfill the conditions of mechanical support, which is the main point in this cure. The spiral spring corset of Dr. Wood was an effort toward suspension of the adjacent vertebrae, but the apparatus of L. A. Sayre, M.D., is effectual in its operation, and, with the silicate of soda bandage, gives ready relief to this disease and bright hopes of cure.

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